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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/625,396

07/23/2003

Kevin Gerard Fraser

STAR-2

9095

7590
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Belleville, IL 62221

09/05/2008

EXAMINER

YI, STELLA KIM

ART UNIT

PAPER NUMBER

1791

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/625,396	Applicant(s) FRASER, KEVIN GERARD	
	Examiner Stella Yi	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 10,11,17,23,25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12, 14-16, 18-22, 24, 27-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 2, 2007 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9, 12, 14-16, 18-22, 24, and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over PEKAR (5,638,565) and in further view of EVANS (4,864,671).

Regarding claim 1, PEKAR discloses a method of fabricating a cellular cushion that comprises (1) forming a cushion first layer that is formed integrally with a plurality of hollow cells that extend outward from the first layer, such that each of the plurality of cells extends only from a root defined at the first layer to a tip, and such that the plurality of cells extending from the first layer are coupled together in flow communication (Col.3,

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lines 11-34; 11-Figure 1); (2) coupling a second layer (13-Figure 1) to the first layer; and (3) coupling an injection stem (note inflation means 24 illustrated in Figures 1 and 2) in flow communication to the plurality of hollow cells to enable an operating pressure within the plurality of hollow cells extending from the same layer to be changed (Col.6, lines 56-65). PEKAR appears to be silent concerning the manner in which the hollow cells are formed. However, EVANS discloses a method of forming a cushion, the aspect of forming such cells by using an injection molding process (Col.4, line 31). It would have been obvious to one of ordinary skill in the art to use an injection molding process, as taught by EVANS, in the method of PEKAR in order to facilitate the formation of cells.

PEKAR teaches the formation of a plurality of hollow cells, as in claims 2 and 22, which can expand, as in claim 3, the incorporation of fluid control devices, as in claim 4, the inclusion of a third or outer layer, as in claims 5-7 and 29-31 (Figures 11-12). The cushion of PEKAR is capable of increasing pressure while in operation, in the manner of claims 32-33 (Col.6, lines 43-55). PEKAR also teaches the use of an inflation stem (24 in Figures 1 and 2), as in claims 8, 15, 16, and 21 and the coupling of a sealing layer and release agent (Col.5, lines 47-63) as in claims 12, 14, 18-20, 24, 27 and 28. PEKAR discloses coupling the said layers using an RF welding process as in claims 9 and 20 (Col.6, lines 50-53).

Response to Arguments

4. Applicant's arguments filed November 2, 2007 have been fully considered but they are not persuasive.

Applicant argues on pages 8-15 of the Remarks:

a) Pekar does not describe nor suggest a cushion having a plurality of cells that extend outward from only one of the base layers, and from a root defined at that layer to a tip.

b) Pekar does not describe nor suggest that the conduits are aligned substantially in the same plane.

c) At Col.4, lines 62-67, Pekar does not describe nor suggest that slits (22) are fluid control devices that are positioned between adjacent pairs of cells coupled to the same base layer.

d) Pekar nor Evans, considered alone or in combination, describes or suggests forming, via an injection molding process.

e) No combination of Pekar and Evans describes nor suggests a method of fabricating a flexible cushion as is recited in claim 12.

f) No combination of Pekar and Evans describes nor suggests a method of fabricating a cellular cushion as is recited in claim 24.

Examiner respectfully disagrees with the Applicant's above arguments and would like to point out the reason(s) as discussed in the rejection:

a) –b) PEKAR discloses a method of fabricating a cellular cushion that comprises (1) forming a cushion first layer that is formed integrally with a plurality of

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hollow cells that extend outward from the first layer, such that each of the plurality of cells extends only from a root defined at the first layer to a tip, and such that the plurality of cells extending from the first layer are coupled together in flow communication (Col.3, lines 11-34; 11-Figure 1). "Figures 1-3 of Pekar show that when the cushion is inflated, the upper and lower surfaces of chambers 14 define the extent of the upper layer 11 as the portion thereof that lay between parallel tangents t, while the chambers 14' similarly define the lower layer 13 of the multi-laminar cushion. Also, conduits are disposed between unsealed portions of sheets 40 and 42 and as such, are incorporated directly into the layer 11 to provide intralayer fluid communication between the contiguous portions of the upper chamber portions 14" (Col.3, lines 25-34). The conduits are aligned substantially in the same plane as seen in Figures 1-3.

c) Pekar does describe fluid control devices, conduits 20, that are positioned between adjacent pairs of cells coupled to the same base layer as seen in Figures 1-3.

d)-f) In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, PEKAR appears to be silent concerning the manner in which the hollow cells are formed. However, EVANS discloses a method of forming a cushion, the aspect of forming such cells by

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using an injection molding process (Col.4, line 31). It would have been obvious to one of ordinary skill in the art to use an injection molding process, as taught by EVANS, in the method of PEKAR in order to facilitate the formation of cells.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stella Yi whose telephone number is 571-270-5123. The examiner can normally be reached on Monday - Thursday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SY

/Christina Johnson/
Supervisory Patent Examiner, Art Unit 1791